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A Digital Criticality Safety Document Collection Available through the U.S. Department of Energy's NCSP Web Site

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A Digital Criticality Safety Document Collection Available
through the U.S. Department of Energy's NCSP Web Site
Washington, DC, United States
October 30, 2011 through November 3, 2011

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A Digital Criticality Safety Document Collection Available through the U.S. Department of Energy's NCSP Web Site

Washington, D.C., November 1, 2011



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The NCSP Digital Document Collection

- Based upon our hardcopy collection of roughly 4000 documents.
- These documents were acquired during a period of about 60 years at LLNL.
- Some of the collection remains to be catalogued.
- High-resolution scanning is in progress.
- As the scans are completed, the digital documents are made available through the NCSP/LLNL bibliographic database.



The Hardcopy Collection



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Internal Memos Not Yet Catalogued



LLNL Staff Members Have Utilized the Collection

- Song Huang presented a paper at the June, 2011 summer ANS meeting on his study of “The Influence of the Density Law on Various Fissile Single Unit and Array Storage Methods.”
- This study involved the review of features of hand-calculation methods that were reported many years ago.
- His proximity to the LLNL physical document collection helped him to locate most of the old documents that he needed. *Our scanned image resource enables NCSP users to use the document collection remotely.*



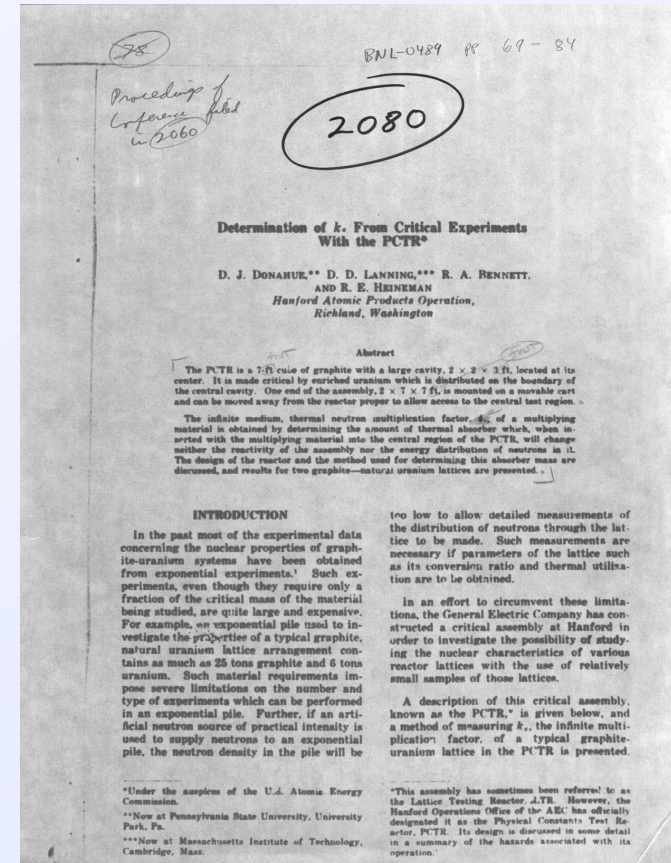
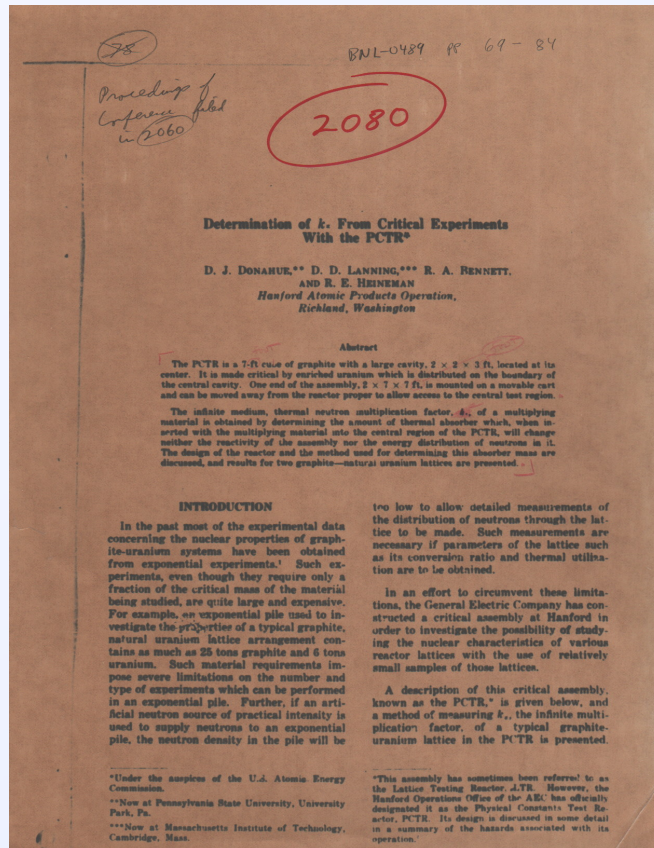
Digital Scanning Helps Ensure Preservation

Hardcopy Documents Can Be Lost through Decay or Otherwise

Scanning Helps to Preserve this Resource



Preservation, then Restoration



Conferences Are High in Our Scanning Queue

- Early conference proceedings are being scanned.
- We have volumes of proceeding of international conferences published during the 1950-1960 time period. Many of these conferences were sponsored by the United Nations (UN) or the International Atomic Energy Agency (IAEA)



Early International Conferences

- First United Nations International Conference on the Peaceful Uses of Atomic Energy, Geneva, Switzerland, 8-20 August 1955
- French-American Conference on Graphite Reactors, November 12 to 15, 1957
- Second United Nations International Conference on the Peaceful Uses of Atomic Energy, Geneva, Switzerland, 1-13 September 1958
- Criticality Control in Chemical and Metallurgical Plant, Karlsruhe Symposium, Organisation for Economic Co-Operation and Development European Nuclear Energy Agency, 1961



Several International Conferences in the 1960s

- Seminar on Neutron Physics of Reactors Utilizing Fast and Intermediate Neutrons, Vienna, Austria, August 3-11, 1961
- Panel on Light Water Lattices, Vienna, Austria, May 1962
- Panel on Heavy Water Lattices, Vienna, Austria, February 1963
- Symposium on Exponential and Critical Experiments Held by the International Atomic Energy Agency in Amsterdam, Netherlands, 2-6 September 1963

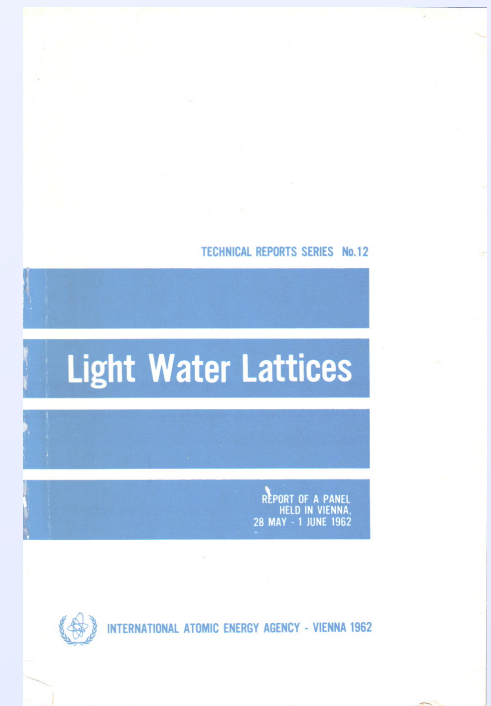
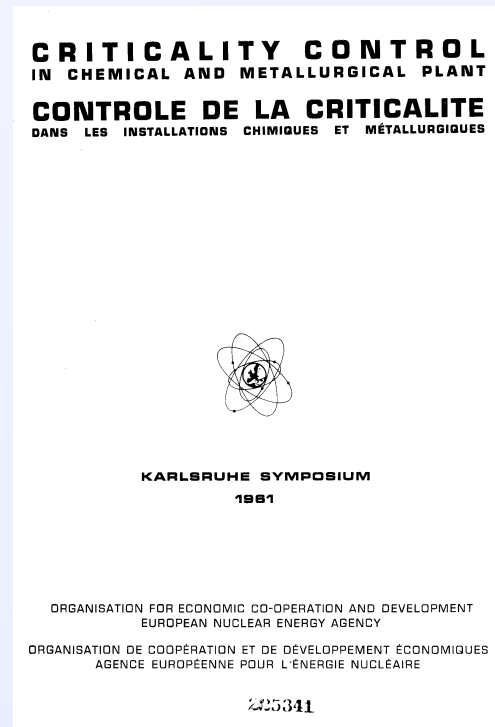
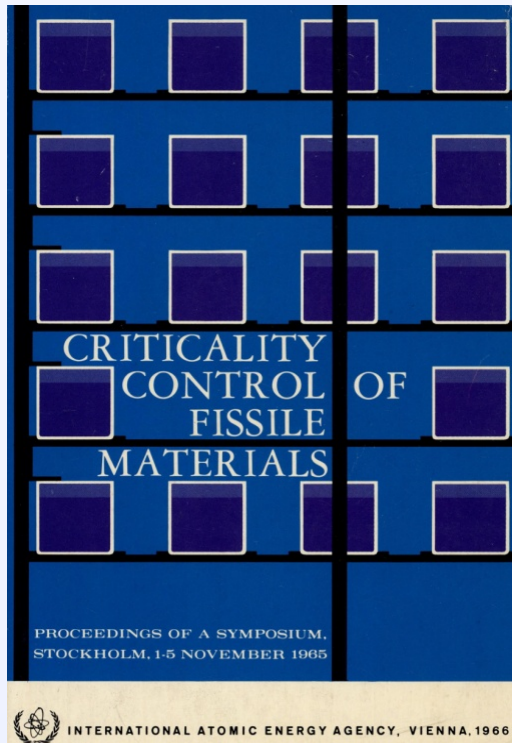


More Early International Conferences

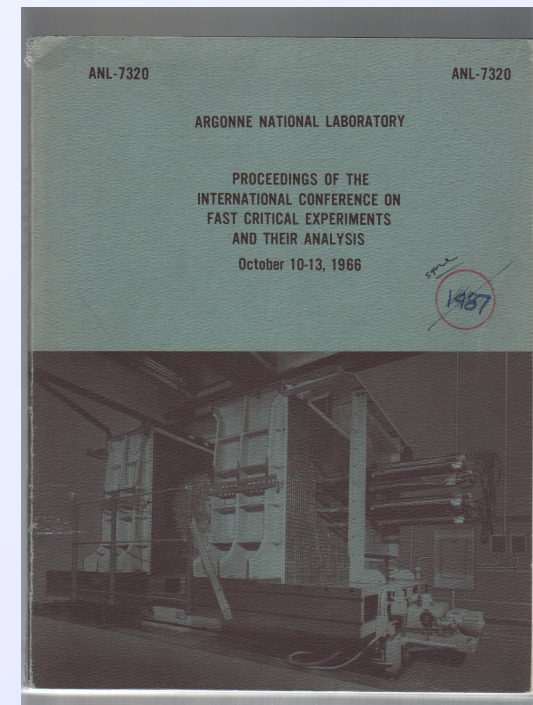
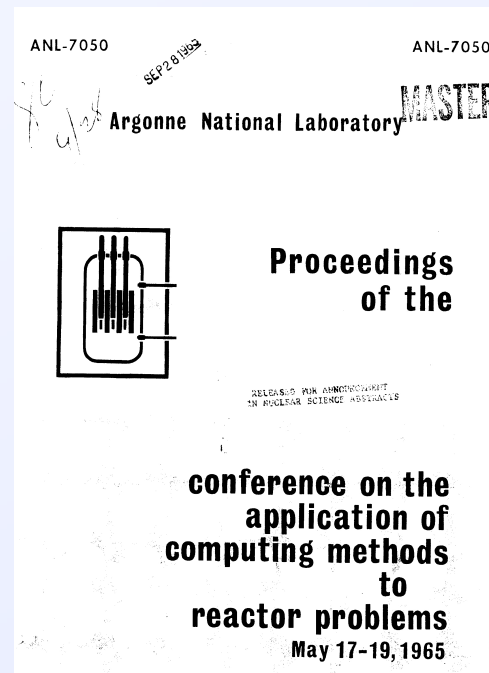
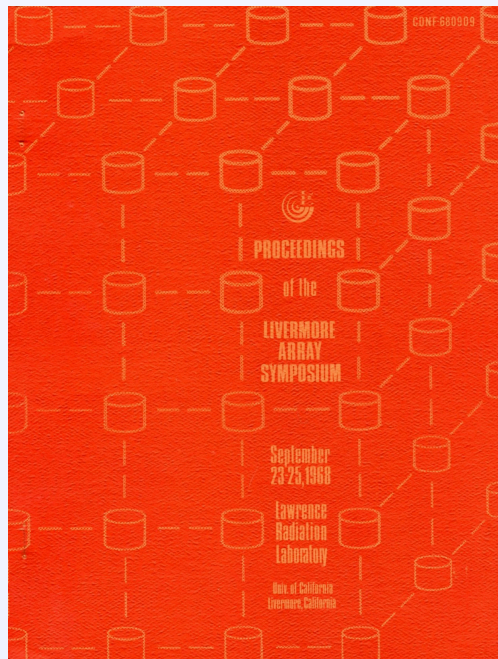
- Third United Nations International Conference on the Peaceful Uses of Atomic Energy, Geneva, Switzerland, 31 August-9 September 1964
- Symposium on Criticality Control of Fissile Materials Held by the International Atomic Energy Agency at Stockholm, 1-5 November 1965
- Symposium on Fast Reactor Physics and Related Safety Problems, Karlsruhe, Germany, 1968



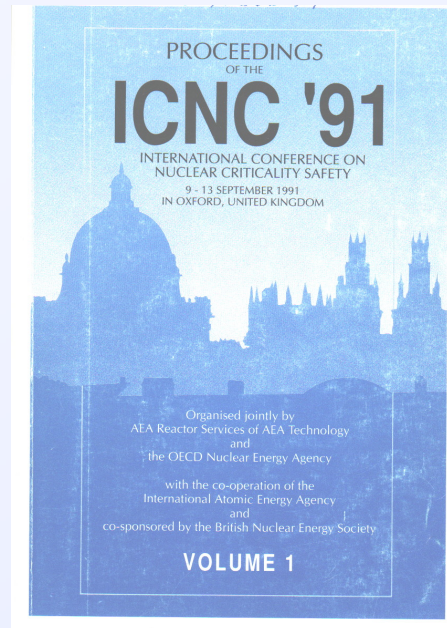
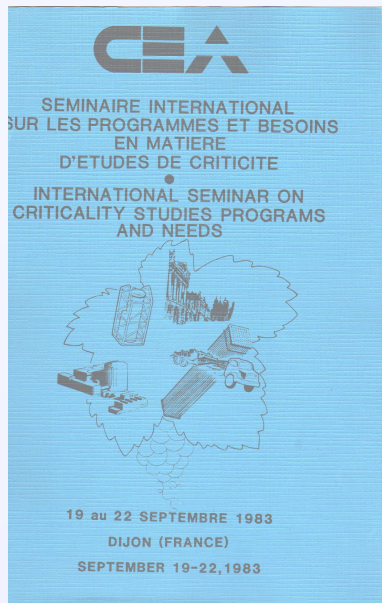
International Conferences --Samples



Many More Available



All of the ICNC Conferences Are Available



Many Old Documents -- Worth Saving



In Summary

- The NCSP web bibliography can assist in identifying a document but obtaining a copy can still be difficult and costly, perhaps impossible.
- We have a large collection of conference proceedings and hardcopy reports that are being scanned and made available in digital form via NCSP.
- Dispersal of the document collection or even storage at a federal records center could make the scanning effort unpractical in the future.
- The best method of long-term preservation of the documents is in digital format.





Thank You For Your Attention

